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# **The Effectiveness of Hopeful Mind Program among Primary School Children in Malaysia: A Preliminary Study**

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## **Abstract**

The increasing prevalence of mental disorders among children warrant an investigation to evaluate the effectiveness of mental health prevention program to help children dealing with life challenges effectively. A quasi-experimental pre prevention-post prevention research design was conducted to evaluate the effectiveness of Hopeful Mind program among primary school children in Malaysia. Sixty-nine primary school children aged 10-11 participated in this study. Thirty-seven of them were randomly assigned in prevention group and 32 of them were assigned in control group. Results showed that the depressive symptoms for the prevention groups decreased significantly. The prevention group showed a significant improvement in their negative emotional regulation and in controlling their emotions. Results also showed some significant findings between genders. Male children reported significant decreased score in depression and gained significant score improvements in emotional control than the female. Thus, the present study suggested that Hopeful Mind program is feasible in supporting Malaysia children in terms of reducing their depressive symptoms, regulating and controlling their emotion. Several limitations and recommendation for future studies were discussed and presented.

**Keywords:** depression, anxiety, hopeful mind program, children

## Introduction

Recently, mental health issues among children is increasing and in an alarming trend as compared to 20 years ago (WHO, 2018). Globally, a few studies have reported the increasing trend of depression and anxiety prevalence among children and adolescents. In the United States, the epidemiology of anxiety or depression among children aged 6–17 years increased from 5.4% in 2003 to 8% in 2007 and to 8.4% in 2011–2012 (Bitsko, Holbrook, Ghandour, et al., 2018). Mental disorders were found to be increased in the UK as well. Data from a national survey series published in 2018 reported an increasing trend in the prevalence of mental disorder in 5 to 15-year olds. The prevalence increased from 9.7% in 1999 and 10.1% in 2004, to 11.2% in 2017 (National Health Survey, 2018). In Uganda, anxiety disorders among children and adolescents were estimated between 10-20% (Abbo, Kinyanda, Kizza, et al., 2013). In India, 7.7% of adolescents reported having severe depressive symptoms and 18.1% had moderate depression (Jha, Singh, Nirala, Kumar, Kumar, & Aggrawal, 2017).

In Malaysia, the National Morbidity and Health Survey in 2015 showed a worrisome trend of increasing mental health issues among the public communities with a prevalence of 10.7% in the year of 1996 increased to 29.2% in the year 2015 (Ministry of Health Malaysia, 2015). The mental health problem among children aged 5 to 15 years old was as high as 12.1% in the same survey found in 2015. The state of Sarawak was found to have the highest prevalence of mental health problem among children, which was reported as high as 16.0%. The prevalence for male was 14.2% whereas female was higher, at 17.3% (Ministry of Health Malaysia, 2015).

Children and adolescents who have some mental health issues if left without any prevention may lead to complication and more severe mental health issues in their later life or adulthood (Greenberg & Harris, 2012; Hofmann, Sawyer, Witt, & Oh, 2010; Snyder et al., 2002). As mental health problems are high and increasing in trend, there is a need for effective prevention program for children and adolescents. For example mental health services which are included within school systems can create a continuous and improved mental health wellbeing and educational performance for children (Fazel, Hoagwood, Stephan, & Ford, 2014; Fazel, Patel, Thomas, & Tol, 2014). Children spend more time in school where their psychosocial development takes place, making school setting is a conducive environment for a school-based mental health prevention to be implemented (Calear & Christensen, 2010; Hofmann et al., 2010). Thus, using school as a prevention program setting is ideal for school children.

One of the prevention programs that could potentially effective to help children and adolescents dealing with mental health issues is Hopeful Minds (Goetzke, Tate, Patel & Lewis, 2014). This program was designed based on Hope theory (Snyder, 2000) to provide children some psychological resources in dealing with life challenges. Previous studies have demonstrated that hope led to significant positive affect among 975 adolescents in a longitudinal study (Ciarrochi, Parker, Kashdan, Heaven & Barkus, 2015). Utilizing structural equation model, they also found that “hope predicted future well-being of the adolescents especially well in years when the young people where in transition (e.g. starting high school and transitioning to senior high school)”, (Ciarrochi et al., 2015, pp 532). While Ciarrochi and colleagues (2015) study focused on Grade 7-12 adolescents, the current study explores mainly primary school children. Considering there are some significant findings relating and predicting between hope and positive affects (Ashby, Dickinson, Gnlika, & Noble, 2011; Ciarrochi et al., 2015), academic achievement (Marques, Ribeiro, & Lopes, 2011); personal adjustment (Gilman et al., 2006), happiness and purpose in life (Bronk, Hill, Lapsley, Talib, & Finch, 2009) among adolescents, the current study explores if hope can bring positive outcome among our primary school children as well. To our knowledge there is no study that have explored this potential among Malaysian children. The objective of this study is to evaluate if hopeful mind prevention

program is effective to decrease symptoms of depression and anxiety, and to increase feelings of hope, coping skills, resiliency, and emotional regulation.

It is hypothesized that participants who receive Hopeful Mind prevention program will report significantly lower depressive and anxiety symptoms. It is also hypothesized that participants who receive Hopeful Mind prevention program will report significantly higher score for hope, coping skills, resiliency and emotional regulation.

## **Method**

### ***Design***

This study adopted a quasi-experimental pre prevention-post prevention research design when participants were assigned to prevention and control group based on their availability and voluntary participation in the program. This research design measures several scores between pre and post prevention program. The variables measured in this study were hope, depressive and anxiety symptoms, resiliency, emotional regulation, and coping skills.

### ***Participants***

In this preliminary study, the sample size was determined based on central limit theorem in statistic (Kwak & Kim, 2017) in which minimum sample size of 30 would be sufficient. (Initially, 75 children agreed to participate in the study. Three of them did not complete their prevention program and the other three did not complete their post-test questionnaires. Thus, this study consisted of 69 primary school children aged 10-11 with mean age of 10.9 years ( $SD. = .12$ ) living in Kuching, Sarawak, one of the states in East Malaysia. There were 69.6% ( $n = 48$ ) female students and the remaining were male. All of them are fluent in English. Thirty-seven of them were randomly assigned in a prevention group and 32 of them were assigned in control group.

### ***Procedure***

In early stage of participant selections, a convenient sampling was used in which participants were recruited based on their availability. Other inclusion criteria were that their willingness to participate, permission was granted by their parents or legal guardians, fluent in English language, and were able to follow all the 10 weeks of Hopeful Mind learning lessons. The exclusion criteria were those who were not fluent in English and were not able to commit the 10 weeks of lessons. Later, those who agreed to participate, were randomly assigned treatment and control group. Participant information and Consent Form was obtained from their parents. Participants were briefed regarding confidentiality and structure of instrument used in the research. Treatment program was executed, and post-prevention measurements were administered.

Ethics clearance and approval from Research and Ethics Committee, Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak was obtained for data collection and research permission letters was forwarded to respective universities management. Approval letter from Ministry of Higher Education's Planning, Research and Policy Coordination Division was also obtained.

### ***Instruments***

**Hope.** Hope was measured by the Children's Hope Scale (CHS), (Snyder et al, 1997). This scale was developed to measure levels of hopeful thought in children. The scale consists of six items measuring pathways thinking (3 items) and agency thinking (3 items). Participants were required to report how often each item describes them using a Likert scale ranging from 1 (none of the time) to 6 (all of the time). The items can be summed to create both subscale scores and

overall hope scores. Higher score indicates higher hope. CHS total score of  $< 3.0$  is interpreted as low hope, score between  $3.0 - 4.67$  is interpreted as medium hope, and score  $> 4.67$  is considered high. In the current study, the CHS Cronbach Alpha was .79 with test-retest reliability result was significant at  $r = .32, p < 0.01$  for over 2 months in between the first and the second test.

**Anxiety.** Anxiety was measured using the Generalized Anxiety Disorder (GAD), a 6-item sub scale from the 44-item Spence Children's Anxiety Scale (Spence, 1998). The scale is a self-report measure of anxiety originally developed to examine anxiety symptoms in children aged 8-12 years. Participants were asked to indicate frequency in which each symptom occurs on a four-point scale ranging from "Never to Always". Higher total scores reflect higher level of GAD symptomatology. In this study, the Cronbach alpha for this instrument was .65.

**Depression.** The Centre for Epidemiological Studies Depression Scale for Children (CESD) (Weissman, Orvaschel, & Padian, 1980) is a 20-item self-report measure for depressive symptoms with scores ranging from 0 to 60. Each item is rated on a 4-point Likert scale in terms of its frequency. It is calculated by summing up all the items, higher total scores reflect higher levels of depressive symptomatology. In the current study, CESD Cronbach Alpha was good with  $\alpha = .76$  with test-retest reliability was significant at  $r = .62, p < 0.01$  for over 2 months in between the first and the second test.

**Resilience.** The Child and Youth Resilience Measure 28 (CYRM-28; Ungar & Liebenberg, 2011), is a 28 item, culturally sensitive screening tool and it was used to explore psychosocial resources available to the participants. Respondents were asked to what extent do the sentences below described them, rated on a three-point Likert scale "No", "Sometimes" or "Yes". The scale measures three areas; individual, caregiver and contextual resilience, with higher scores indicating greater resource availability or also higher scores indicate higher levels of characteristics associated with resilience. The internal consistency for the scale in this study was  $\alpha = .65$ . In the current study, CYRM Cronbach Alpha was good with  $\alpha = .71$  with test-retest reliability was significant at  $r = .55, p < 0.01$  for over 2 months in between the first and the second test.

**Emotion Arousal/Regulation.** How I Feel (HIF) (Walden, Harris, & Carton, 2003), was designed for children between 8 and 12 years of age to measure participant's emotional arousal. The scale consists of 30 items concerning the frequency, intensity and control of excitement, happiness, fear and anger. It contains the three sub-scales, positive emotion such as feeling happy often and feeling excited all the times, negative emotion such as feeling of sadness, and emotion control. Higher score of each subscale indicates higher positive emotion, negative emotion, and emotion control. In the current study, HIF Cronbach Alpha was good with  $\alpha = .88$  with test-retest reliability was significant at  $r = .56, p < 0.01$  for over 2 months in between the first and the second test.

**Coping.** The Measure of Adolescent Coping Strategies (MACS) (Sveinbjornsdottir & Thorsteinsson, 2008; 2014) was used to measure participants coping strategies. Participants were asked to think of a stressful situation they have experienced during the recent past and they have to answer questions relating to how often they used different methods of coping in this situation. The scale consists of 34 items rated on a four-point Likert scale. Four subscales were utilised from this scale measuring three "adaptive" coping skills (self-care, distraction, and seeking social support) and on maladaptive coping strategy (rumination). Higher total

scores in each of the subscales indicate greater use of that coping strategy. The internal consistency of MACS in this study was  $\alpha = .85$ . The test-retest reliability was significant at  $r = .63, p < 0.01$  for over 2 months in between the first and the second test.

### ***Hopeful Mind Prevention Programme***

Hopeful Minds prevention program was designed by Goetzke and colleagues (2014). It was designed based on Hope Theory to promote mental health among children and adolescents. The focus of the programme is to teach students the social and emotional learning tools to develop and maintain “hope”. This activity-based programme is facilitated once a week by trained clinical psychologists who underwent a two-days Hopeful Minds facilitator training workshop. The programme consists of 12 core lessons:

Lesson 1- What is hope	Lesson 2 -Why is hope important
Lesson 3- The brain and hope	Lesson 4- Creating a hopeful mindset
Lesson 5- Having a hopeful purpose	Lesson 6- Hopeful goals and pathways
Lesson 7- Reviewing hope	Lesson 8- A hopeful approach to change
Lesson 9 Finding hope after failure	Lesson 10 Shifting rumination through hope
Lesson 11 Challenges to hope	Lesson 12 Giving hope

This activity-based programme is facilitated once a week by trained teachers or volunteers who underwent a two-days Hopeful Minds facilitator training workshop. The program was conducted within two hours each week and it was conducted over a period of 10 weeks. Lesson one and two were combine in one week session. Similarly, Lesson 11 and 12 were combined into one session as well. All lessons were conducted during the school hours.

### ***Data analysis***

A repeated measure ANOVA was conducted to examine the effect of prevention program (before and post-prevention) and gender. If the Mauchy’s Test of Sphericity was significant, the univariate test was reported based on the Greenhouse Geisser estimation to report any significant outcome of the prevention program. An ANOVA was conducted to compare the effectiveness of Hopeful Mind program between prevention and control group on the total score of depressive and anxiety symptoms, hope, resiliency, emotional regulation, and coping skills.

## **Results**

### ***Characteristics for Both Control and Prevention Group***

A statistical analysis was conducted to determine the homogeneity of participants both in prevention and control group. Results showed that there were no significant mean differences in age ( $t = .097, p = .923$ ) and gender ( $t = .857, p = .394$ ). The retention rate for the prevention group was 95% and for the control group was 97%. After the data cleaning, and at baseline, the treatment and control groups showed no significance difference in terms of sociodemographic variables (Table 1).



Table 1: Descriptive Characteristics of Participants ( $N = 69$ )

Characteristic	Treatment ( $n = 37$ )	Control ( $n = 32$ )	Total ( $n = 69$ )
Age ( $M, SD$ )	11 (0.0)	10.97 (0.16)	10.99 (0.12)
Gender			
Female	23	25	48
Male	14	7	21
Siblings			
1	5	2	7
2	9	2	11
3	7	9	16
4	11	8	19
5	2	6	8
6	2	3	6
7	0	2	2
Living condition, n (%)			
Both parents	31 (83.8)	25 (78.1)	
One parent	4 (10.8)	3 (9.4)	
Other relatives	2 (5.4)	2 (6.3)	
Others	-	1 (3.1)	
Bedtime ( $M, SD$ )	10.05 (1.81)	10.08 (0.92)	
Exercise (%)	78.4	78.1	

#### ***Treatment Effect between Prevention and Control Group***

An ANOVA was conducted to compare the effectiveness of Hopeful Mind program between prevention and control group on score of depressive symptoms. There was very significant effect of Hopeful Mind prevention program,  $F_{(1,67)} = 14.75, p < .001$  (*Huynh-Feldt*). The depressive scores for the treatment groups dropped significantly from the mean scores of 30.67 ( $SD = 3.52$ ) to 24.60 ( $SD = 6.44$ ), whereas the control group the scores slightly increased from the mean of 21.29 ( $SD = 7.10$ ) to 23.67 ( $SD = 7.35$ ) and this has reached to its significance level,  $F_{(1,67)} = 9.25, p = .003$ .

An ANOVA was also conducted to compare the effectiveness of Hopeful Mind prevention program between treatment and control groups on various scores. There were no significant effects of Hopeful Mind prevention program on anxiety symptoms scores,  $F_{(1,67)} = 0.42, p = .52$  (*Huynh-Feldt*), hopeful thoughts,  $F_{(1,67)} = 0.68, p = .41$  (*Huynh-Feldt*), resiliency scores,  $F_{(1,67)} = 0.02, p = .89$  (*Huynh-Feldt*), emotional regulation,  $F_{(1,67)} = 1.35, p = .25$  (*Huynh-Feldt*), and coping strategies,  $F_{(1,67)} = 0.21, p = .65$  (*Huynh-Feldt*). The detailed results are shown in Table 2.

Table 2: Mean, standard deviation and repeated measures for the treatment and control group of Hopeful Mind Program.

Measures	Treatment group		Control group		$F$ -value ( $p$ -values)
	Pre, $M$ ( $SD$ )	Post, $M$ ( $SD$ )	Pre, $M$ ( $SD$ )	Post, $M$ ( $SD$ )	
Hopeful thoughts	19.40 (4.93)	21.27 (5.71)	19.49 (5.19)	20.04 (4.34)	0.68 (.41)
Resilience	65.20 (7.29)	65.87 (7.93)	66.19 (5.66)	67.13 (6.15)	.02 (.89)*
Depression	30.67 (3.52)	24.60 (6.45)	21.39 (7.10)	23.67 (7.35)	14.75 (<.001)
Anxiety	10.27 (3.33)	9.60 (3.04)	8.37 (3.26)	8.35 (2.85)	.42 (.52)*

Emotion Regulation	96.87 (22.67)	91.53 (11.87)	83.89 (15.16)	84.06 (16.49)	1.35 (.25)
Coping	58.53 (9.30)	60.00(10.10)	54.33 (12.86)	54.13 (15.79)	.21 (.65)

There was a significant difference in negative emotional regulations scores between prevention and control groups,  $F_{(1,67)} = 4.45$ ,  $p = .04$ . The prevention group scores dropped from mean scores of 38.73 ( $SD = 9.88$ ) to a mean score of 34.87 ( $SD = 8.62$ ) whereas the control group increased their mean scores from 31.30 ( $SD = 7.92$ ) to mean scores of 32.39 ( $SD = 10.42$ ). Similar result was found in their emotional control. The prevention group scores dropped significantly from mean scores of 32.47 ( $SD = 8.78$ ) to a mean score of 31.20 ( $SD = 5.72$ ) whereas the control group showed no differences in their mean scores (Pre:  $M = 27.59$ ,  $SD = 5.81$ ; Post:  $M = 27.43$ ;  $SD = 5.10$ ). This showed that the prevention group had significantly improved in regulating their negative emotions and controlling their emotions.

### ***Treatment Effect and Gender differences***

A repeated measure ANOVA was conducted to compare the effectiveness of Hopeful Mind prevention program between gender among treatment group on score of depressive symptoms. There was a very significant effect of Hopeful Mind prevention program,  $F_{(1,24)} = 5.087$ ,  $p = .033$  (*Huynh-Feldt*). Male participants (Pre:  $M = 31.29$ ,  $SD = 5.80$ ; Post:  $M = 21.17$ ;  $SD = 6.29$ ) gained significant benefit in Hopeful Mind program than the female (Pre:  $M = 30.63$ ,  $SD = 4.73$ ; Post:  $M = 28.26$ ;  $SD = 5.80$ ) as their symptoms of depression decreased significantly.

A repeated measure ANOVA was conducted to compare the effectiveness of Hopeful Mind prevention program between gender on score of emotional control which is subscale of emotional regulations. There was a very significant effect of Hopeful Mind prevention program between genders,  $F_{(1,24)} = 5.39$ ,  $p = .029$ . Male participants (pre:  $M = 30.14$ ,  $SD = 10.88$ ; post:  $M = 34.00$ ;  $SD = 6.11$ ) gained significant score improvements in emotional control than the female (Pre:  $M = 30.68$ ,  $SD = 6.08$ ; Post:  $M = 28.21$ ;  $SD = 4.16$ ). It indicates that male participants learnt more in controlling their emotion during prevention program.

An additional repeated measure ANOVA was also conducted to compare the effectiveness of Hopeful Mind prevention program in reducing various scores between gender among the treatment group participants. There were no significant effects of Hopeful Mind prevention program on anxiety symptoms scores,  $F_{(1,24)} = 0.65$ ,  $p = .43$  hopeful thoughts,  $F_{(1,24)} = 3.27$ ,  $p = .083$  resiliency scores,  $F_{(1,24)} = 0.003$ ,  $p = .96$  (*Huynh-Feldt*), emotional regulation,  $F_{(1,24)} = 1.11$ ,  $p = .30$  (*Huynh-Feldt*), and coping strategies,  $F_{(1,24)} = 0.20$ ,  $p = .30$  (*Huynh-Feldt*).

### **Discussion**

This study aimed at evaluating the effectiveness of Hopeful Mind prevention program on symptoms of depression and anxiety, hopeful thoughts, resiliency, emotional regulation, and coping strategies among primary school children in Malaysia. The finding from this study showed that Hopeful Mind prevention program decreased depressive symptoms significantly. This finding is consistent with the previous studies (Pössel, Martin, Garber, & Hautzinger, 2013; Merry, Hetrick, Cox, Brudevold-Iversen, Bir, McDowell, 2011; Spence, Sheffield, & Donovan, 2003). While Pössel and colleagues (2013) found a significant reduction of depressive symptoms only at the 4th-month follow up among adolescents, 15 studies reported having immediate reduction of depressive symptoms following prevention program for depression among children and adolescents aged 5-19-years old (Merry et al., 2015). There are three possible explanations for these different findings. Firstly, since the current study mainly focuses on primary school children, we view that perhaps younger children are more open and receptive in early prevention program and the impact is more immediate than the older



adolescents. Secondly, the current study has some similarity with Merry et al., (2011) in regard to the age of their participants. They included younger age children in their study as well. Perhaps the younger children are the one who were more receptive in prevention program and adopt the new skills more immediately than the older children. Thirdly, the older children were speculated to take longer time to adapt with the newly introduced life skills in their daily life (Pössel et al., 2003) in comparison with the younger children. Thus, teaching the younger children on hope and the importance of it at the early age perhaps is useful and more impactful for the prevention of depression in adolescents.

There was a significant improvement in negative emotional regulations subscale scores; the negative emotional regulation scores in prevention group decreased significantly. Similar result was found in their emotional control scores. The prevention group reported a significant improvement in controlling their emotions. The finding is consistent with a study that was conducted by Werner-Seidler and colleagues (2013). They suggested that individuals who have poor ability to regulate emotion, they reported having depressive symptoms as well. Thus, in this study, it appears that depressive symptoms reduction could be directly associated with the reduction of negative emotional regulation. It was also proven in a few studies that children and young adolescents increasingly used more adaptive emotional regulation strategies as they were going older (Zimmermann & Iwanski, 2014; Gullone, Hughes, King & Tonge, 2010), and when prevention program was implemented, it directly benefits the children who participated in the program. It also explains why in the previous studies many psychological prevention and interventions programs for depression include cognitive and behavioral approaches that targeted in improving abilities to regulate emotion (Berking, Wupperman, Reichardt, Pejic, Dippel & Znoj, 2008)

There were no significant effects of Hopeful Mind prevention program on hopeful thoughts, coping strategies, anxiety symptoms, the overall emotional regulation scores, and resiliency. This finding is consistent with Portzky and Heeringen (2006). Portzky and Heeringen (2006) studied a school-based psycho-educational program for suicide prevention, they did not find a significant effect on hopelessness and coping skills following their suicide intervention program. Both the current study and a study conducted by Portzky and Heeringen (2006) did not measure the sixth month and the twelfth month follow up data. Perhaps, the effectiveness of prevention program on hope and coping skills could only be seen after a few months of the program.

Previous studies also found that prevention program did not improve anxiety symptoms. Miller et al., (2011) and Urao et al., (2016) found that there was no significant reduction in anxiety symptoms post prevention program. Urao et al., (2016) found that there was no significant reduction of anxiety symptoms among primary school children following a cognitive behavioural therapy-based anxiety program in Japan when anxiety scores were evaluated by the children themselves. A significant reduction of anxiety symptom was only found when evaluation was made by the parents. Similarly, Miller et al., (2011) reported that their prevention program did not decreased symptoms of anxiety among Australian aborigine children. Firstly, one similarity between the current study with Urao et al., (2016) and Miller et al., (2011) was that our participants were primary school children and the program was conducted between nine to 10 weeks program. Perhaps children at the younger age requires longer and more intensified prevention program in reducing anxiety symptoms. Secondly, perhaps the Hopeful Mind program could incorporate more cultural friendly elements which may address issues related symptoms of anxiety for children in a context specific way.

Various studies were found to report inconsistent results with the current research finding; prevention programs had significantly improved anxiety (Martinsen et al., 2019), hope (Ciarrochi et al., 2015; Marques, Lopez & Pais-Ribeiro, 2011; Merkaš & Andreja Brajša-

Žganec, 2011); emotional regulation (Finlon et al., 2015), and resiliency (Rose, Miller, & Martinez, 2009).). However, resiliency, emotional regulation, and coping strategies and skills might require longer time to be adopted (Rose, Miller, & Martinez, 2009; Marques, Lopez & Pais-Ribeiro, 2011; Finlon et al., 2015). We speculate that perhaps measurement of all variables at the sixth and twelfth month post prevention program would lead to some significant findings. Thus, in future studies, collecting a few months interval data post intervention is crucial to determine whether the prevention effects are maintained for significant period of times (Marques, Lopez & Pais-Ribeiro, 2011).

There was a very significant effect of the Hopeful Mind prevention program for males. Male participants gained significant benefit from the Hopeful Mind program more than the female participants as their symptoms of depression decreased significantly. Furthermore, male participants gained significant score improvements in emotional control than the female participants. It seems that male participants learnt more in regulating and controlling their emotions during the prevention program than the female participants. Previous studies have shown that female adolescents generally report more mental health problems than males (Myrin and Lagerstrom, 2008; Torsheim et al., 2006; West and Sweeting, 2003), which may mean that females may hold fewer stigmatising views about help seeking for mental distress. It is also well-established in the literature that male adolescents traditionally expressed their feelings significantly less than females (Chaplin & Aldao, 2014; de Matos, Barrett, Dadds, & Shortt (2003). Landstedt and colleagues (2009) explained that female and males were exposed to different socio-cultural experiences related to stress, cultural norms, and traumatic experiences. This affects their mental health and how they regulate and control their emotions differently. Thus, when they were trained to receive similar prevention program in hope, perhaps male children received different perspectives and gained significant benefits from the exercise. It is also very likely that since the Hopeful minds program was taught in a universal way, that is, the whole class participated in the programme (not just a selected few pupils identified as struggling), that this mode of delivery reduced stigma and helped to normalise mental health and wellbeing in young people, in particular young males. Universal mental health prevention models (Kieling et al., 2011) are also known to support open emotional expression, develop emotional literacy, a sense of peer connectedness; all of which support the ability of young people to talk about a topic which is traditionally and culturally very difficult to discuss in an open and safe place. The impact of this supports not only universal prevention programs, but it has also supports the efficacy of Hopeful minds program in being able to reach young males in Malaysia.

### **Limitations and Conclusion**

There are some limitations of this study. One possible limitation is the small sample size. We sent our invitations to seven schools in the nearby area but only two of them responded to us showing their interest to participate in this study. Within the two school systems, we sent at least 200 hundred invitations together with consent forms but only 72 parents or guardians allowed their children participation. Although our sample size was small, both prevention and control groups characteristics had shown a significant homogenous characteristic.

In conclusion, results suggest that Hopeful Mind prevention program shows a very promising outcome to improve children's mental health including depression and emotional regulation. Male children have significantly reduced symptoms of depression and reported having significant improvement in regulating their emotion. Our scant reference to literature indicates that up till now, there are no studies conducting any kind of prevention program including Hopeful Mind program to help children dealing with their mental health issues. We hope that

this preliminary study can stimulate for further research in this area and will be improved in the future by increasing the sample size and collecting more follow up data in the future.

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